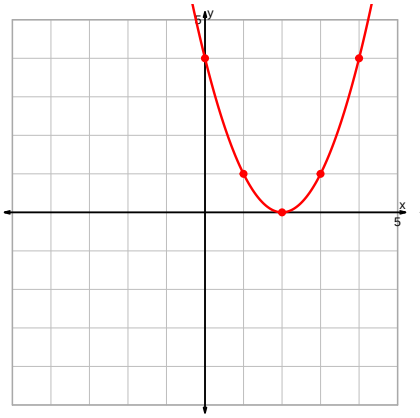
NAME: DATE:

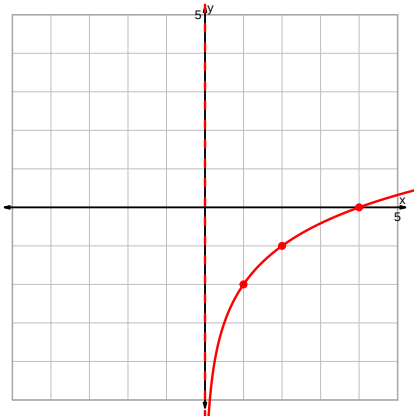
Unit-2 Reduced Mastery Assessment (version 316)

Question 1 (20 points)

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

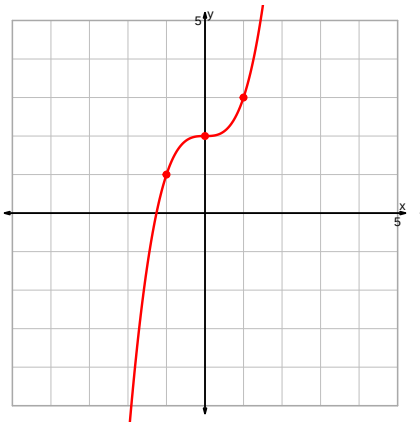
$y = (x-2)^2$

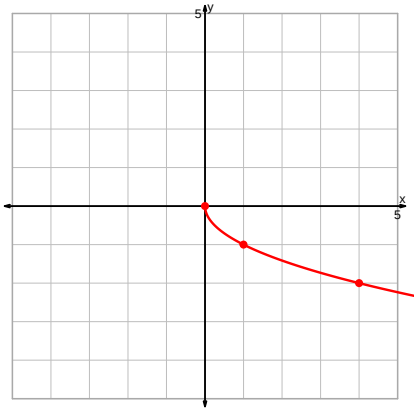




$y = \log_2(x) - 2$

$y = x^3 + 2$

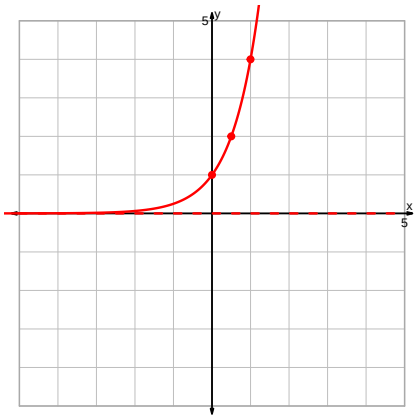


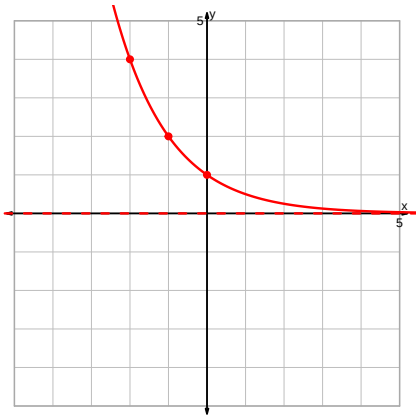


$y = -\sqrt{x}$

Question 2 continued. . .

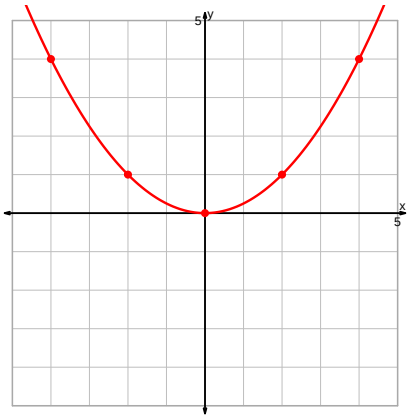
$y = 2^{2x}$

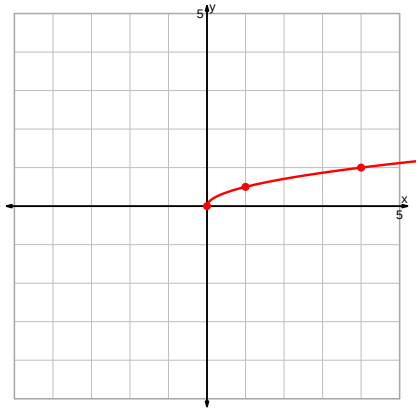




$y = 2^{-x}$

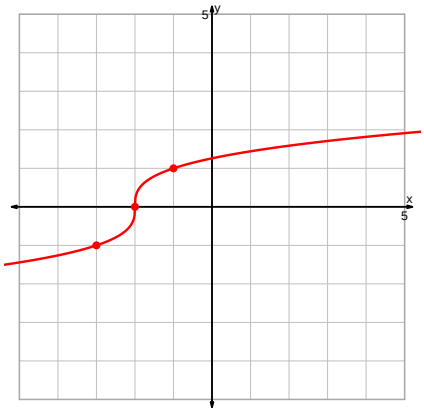
$y = \left(\frac{x}{2}\right)^2$

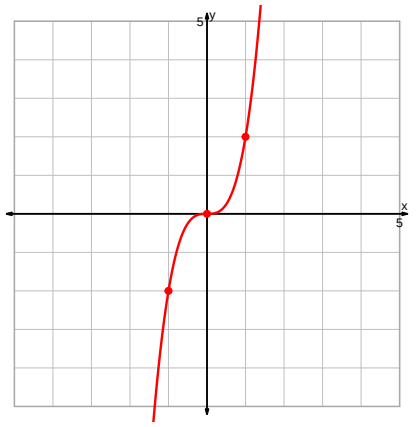




$y = \frac{\sqrt{x}}{2}$

$y = \sqrt[3]{x+2}$

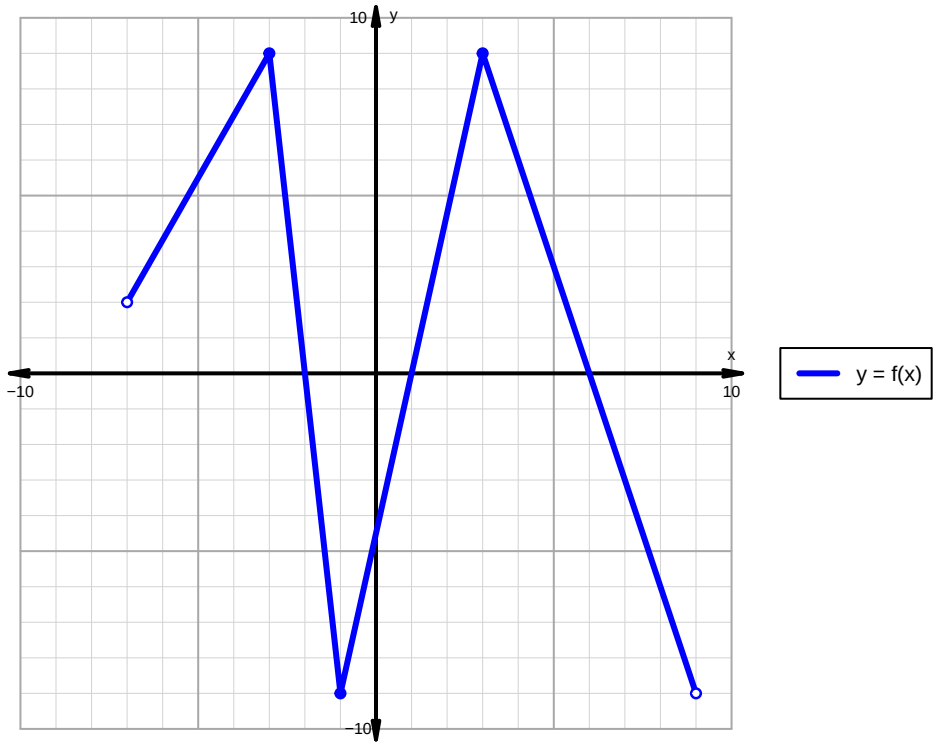




$y = 2 \cdot x^3$

Question 2 (20 points)

A function is graphed below.



Indicate the following intervals using interval notation.

Feature	Where
Positive	$(-7,-2)\cup(1,6)$
Negative	$(-2,1)\cup(6,9)$
Increasing	$(-7,-3)\cup(-1,3)$
Decreasing	$(-3,-1)\cup(3,9)$
Domain	$(-7,9)$
Range	$(-9,9)$